Cardiac Diseases and Therapies
ACUTE CORONARY SYNDROMES

ANTITHROMBOTIC MANAGEMENT OF ACUTE CORONARY SYNDROMES (UNSTABLE ANGINA AND NON-ST ELEVATION ACS) TREATMENT ALGORITHM

Patient presents with symptoms of cardiac ischemia within previous 24 hours:
new onset low threshold ischemia or pain at rest

Appropriate therapy depends on the assessment of Coronary Risk vs. Bleeding Risk
Note: Coronary events usually dominate bleeding events

ASSESS Coronary Risk

- Symptoms strongly suggestive of a ruptured plaque
- Transient ST segment elevation
- Elevation of initial or 8-hour Troponin
- Transient or fixed ST segment depressions
- New T wave inversion
- Hypotension or signs of heart failure
- Breakthrough ischemia while on therapy
- TIMI score ≥3

CONSIDER Bleeding Risk

- Active bleeding
- Recent trauma or surgery
- CVD – Stroke, TIA, ICH, subdural bleed
- Increased risk with increasing age, i.e. >75, >80 years
- Uncontrolled hypertension
- History of previous bleed – GI, GU, retroperitoneal
- DM
- NSAIDs, steroids, oral anticoagulants
- HAS-BLED score >3
  (derived from antithrombins in Atrial Fibrillation)

ED staff in consultation with Cardiology or GIM to determine management strategy

Coronary/Bleed Risk supports early invasive therapy

- ASA 160 mg load, then 81 mg once daily
- heparin bolus and infusion

***add* $P2Y_{12}$**

Coronary angiography < 6hrs, consider waiting to start $P2Y_{12}$ inhibitor (as per criteria below) **until coronary anatomy is known***
Coronary angiography > 6hrs, consider starting $P2Y_{12}$ inhibitor (as per criteria below) **upfront**

LOW Bleeding Risk (& no stroke/TIA/ICH)
prasugrel 60 mg load
then prasugrel 10 mg once daily
or
ticagrelor 180 mg load,
then ticagrelor 90 mg twice daily

HIGH Bleeding Risk
clopidogrel 600 mg load,
then clopidogrel 75 mg once daily
or
None

Coronary/Bleed Risk supports trial of non-invasive therapy

- ASA 160 mg load, then 81 mg once daily
- fondaparinux 2.5 mg SC once daily (or heparin infusion if CrCl <30 mL/min)

***add* $P2Y_{12}$**

LOW Bleeding Risk (and no stroke/TIA/ICH)
clopidogrel 300 mg load,
then clopidogrel 75 mg once daily
or
ticagrelor 180 mg load,
then ticagrelor 90 mg twice daily

HIGH Bleeding Risk
None

REASSESS

***Note:* This flow diagram is intended as a guideline only, and cannot replace clinical judgement or patient preference.**

*ACCOAST trial-increased bleeding risk when half of prasugrel loading dose (30mg) administered in emergency department prior to angiography, without increased efficacy, supports delay in administration of agent until coronary anatomy known

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